Table of Contents: Volume 3

Number 1

Workload Balance and Part-Transfer Minimization in Flexible Manufacturing Systems ..... *Claudio Arbib, Mario Lucertini and Fernando Nicolò* 5

Transient Behavior in a Flexible Assembly System ..... *... S. Thomas McCormick, Michael L. Pinedo, Scott Shenker and Barry Wolf* 27

Emulating Concurrency in a Circuit Card Assembly System ..... *Javad Ahmadi, Stephen Grotzinger and Dennis Johnson* 45

Loading Problems with Tool Management in Flexible Manufacturing Systems: A Few Integer Programming Models ..... *D. de Werra and M. Widmer* 71

Number 2

A Line-Balancing Strategy for Designing Flexible Assembly Systems ..... *Heungsoon Felix Lee and Roger Vivian Johnson* 91

An Efficient Heuristic for Scheduling Batches of Parts in a Flexible Flow System ..... *Sidhartha R. Das and Basheer M. Khumawala* 121

A Scheduling Model for Multirobot Assembly Cells ..... *Gad Rabinowitz, Abraham Mehrez and Subhashish Samaddar* 149

Numbers 3/4

Effectiveness of Flexible Routing Control ..... *Yuh-Jiun Lin and James J. Solberg* 189

The Optimal Configuration and Workload Allocation Problem in Flexible Manufacturing Systems .... *Heungsoon Felix Lee, Mandyam M. Srinivasan and Candace Arai Yano* 213

Specification Methods for Material-Handling Control Algorithms in Flexible Manufacturing Systems ..... *Timothy Thomasma and Kurt Hilbrecht* 231

Modeling and Design Optimization of Asynchronous Flexible Assembly Systems with Statistical Process Control and Repair ..... *Akif Asil Bulgak and Jerry L. Sanders* 251

A Unified Modeling of Kanban Systems Using Petri Nets ..... *Maria Di Mascolo, Yannick Frein, Yves Dallery and René David* 275

Two-Tiered Measurement Systems in Moderninzing Plants ..... *John E. Ettlie* 309

Near Optimal Manufacturing Flow Controller Design ..... *Michael Caramanis and Ali Sharifnia* 321